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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,778	07/20/2000	Yang Cao	Cao-4	3605

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EXAMINER

PEZZLO, JOHN

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/619,778

Applicant(s)

CAO, YANG

Examiner

John Pezzlo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-43 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-9, 12-14, 18-23 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 4-6, 10, 11, 15-17, 24 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

I. Claims 1, 2, 12, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Hluchyj (US 6,381,238 B1).

1. Regarding claims 1 and 12 - Hluchyj discloses a circuit switched switch fabric, refer to Figure 2 callout 26.

Hluchyj discloses a packet switched switch fabric, refer to Figure 2 callout 23.

Hluchyj discloses a controller (refer to Figure 2 callout 21) configured to separate telecommunications traffic received at the hybrid switch, including ATM traffic (refer to column

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1 lines 11 to 33) characterized by at least one service category, and to direct traffic to either a circuit or packet switch fabric, the controller directing ATM traffic of at least one service category to a circuit switched switch fabric, refer to Figure 2 and column 1 lines 28 to 67 and column 2 lines 1 to 11. (The examiner points out that all ATM traffic is at least one service category, either CBR, rt or nrt-VBR, ABR, or UBR.)

2. Regarding claims 2 and 13 - Hluchyj discloses that a portion of the circuit switch resources are provisioned for STM traffic and the remaining portion of the circuit switch resources are allocated to ATM traffic as the controller routes the ATM traffic to the circuit switch, refer to Figures 1 and 2 and columns 1 and 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 3, 7, 8, 14, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hluchyj (same as above) in view of Park et al. (US 6,646,985 B1) hereinafter Park.

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1. Regarding claims 3, 7, 8, 14, 18, and 19 - Hluchyj discloses a hybrid switch but does not expressly disclose an admission control algorithm (claims 3 and 14) or a resource table (claims 7 and 18), or separate ingress and egress resource tables (claims 8 and 19).

Park discloses Generic Flow Control (GFC) call admission control which is an admission control algorithm and resource tables for ingress and egress in the forwarding engine (FE) refer to the abstract and Figure 2 callout 48 and columns 5-8.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the hybrid switch of Hluchyj with the admission control algorithm and resource tables of Park. The suggestion/motivation for doing so would have been that Hluchyj discloses call establishment and providing an admission control algorithm and resource tables will allow the hybrid switch to allocate the bandwidth (resources) optimally and maintain the call connections using the tables.

III. Claims 9, 20, 21, 22, 23, 25, 26, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hluchyj (same as above) in view of Park (same as above) further in view of Ash et al. (US 6,151,315) hereinafter Ash.

1. Regarding claims 9, 20, 21, 22, 23, 25, 26, 27, and 28 - Hluchyj discloses a hybrid switch and call establishment and Park discloses an admission control algorithm and resource tables but neither of the above expressly disclose that all the nodes along the proposed path have accepted an ATM traffic request (claims 9, 20, 21, 25, and 26) and establishing an ATM traffic path after the resources have been allocated (claims 22, 23, 27, and 28).

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Ash discloses that for connection oriented traffic (ATM and circuit switch traffic) a set-up phase occurs before the data is communicated over the channel and during the set-up phase each switch or node in the channel path allocates resources to the connection and then the connection is set-up, refer to abstract and Figures 1 and 2 and columns 2-4.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the hybrid switch with the admission control algorithm and the resource tables with the connection set-up phase in order to properly allocate resources to the ATM traffic (CBR and rt-VBR) over the circuit switched and packet switched domains. The suggestion/motivation for doing so would have been that Hluchyj discloses call establishment and Park discloses admission control and resource tables and providing a set-up procedure would insure that all the nodes and switches along the path have the resources to support the CBR and rt-VBR ATM traffic.

Allowable Subject Matter

Claims 30-43 are allowable over the prior art of record.

Claims 4-6, 10, 11, 15-17, 24, and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 11 May 2004 have been fully considered but they are not persuasive. Applicant argues on page 15 of the response that the reference, Hluchyj (US 6,381,238 B1), does not disclose or suggest that the signal processing servers (callout 21 in Figure 2) can direct processed information to either a circuit switch fabric or a packet switch fabric. The examiner respectfully disagrees. The reference discloses that Figure 2 is a gateway, which is a device that forms a bridge between networks, in this case the two networks are a circuit switch network and a packet network. The reference discloses that the signal processing functions are performed by the signal processing servers (callout 21 in Figure 2) and the signal processing servers route the circuit-to-packet calls through the circuit switch fabric and the packet switch fabric, refer to Figure 2 and column 1 lines 50 to 67 and column 2 line 1.

Applicants argues on page 16 that Park, (US 6,646,985), the secondary reference, does not disclose or suggest a connection admission control algorithm which allocates circuit switch resources to ATM traffic as required by claim 3. The examiner respectfully disagrees. The reference, Park, discloses that non-ATM services are provided over ATM networks, and discloses SONET and frame-based services which are circuit switch resources, refer to column 1 lines 63 to column 2 lines 1 to 25.

Conclusion

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (703) 306-5420. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

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or faxed to:

(703) 872-9306

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

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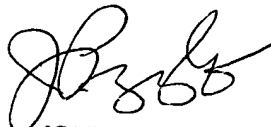
Crystal Park 2

2121 Crystal Drive

Arlington, VA.

John Pezzlo

2 June 2004



JOHN PEZZLO
PRIMARY EXAMINER